

## ABSTRACT

5 A sterile, self-contained, disposable apparatus used for heating and applying solution to the distal end of endoscopes as well as an endoscopic lens protector. The heating mechanism is chemical, electrical or a combination of both. Further the apparatus serves as a self sealing container for the storage and application of anti-fog solution. By placing the apparatus over the distal scope prior to surgery, the scope is protected from damage

10 from other instruments or trays. At the same time the distal lens is submerged in the warm anti-fog solution and it is uniformly and completely coated. Heat is transferred to the instrument from the solution in one example to act as an important and additional measure to prevent fogging of the lens. By heating the solution and the instrument, the drastic temperature difference between the interior of the body (98.6) and the instrument

15 is eliminated. This inhibits the condensation of moisture, which always occurs upon inserting the cool scope inside the warm body. The apparatus combines the use of an anti-fog solution as well, which helps prevent fogging during the procedure when smoke and heat is generated within the body during the procedure. Lastly, the apparatus is designed to be used as a holder of the scope while protecting it from impact with a shock absorbent

20 outer shell prior to, during, and after the medical procedure. A new method for defogging endoscopes by which a sterile protective device is combined with a defogging mechanism and placed over the distal lens of endoscopes prior to the medical procedure, used intermittently during the procedure, then placed over the lens at the end of the procedure. The apparatus is not removed until scope reaches the cleaning facility. This

25 apparatus is ideal for sterile operations where the instrument is used intermittently and repeatedly.